

Notice of Allowability

Application No.

09/914,281

Examiner

Ramnandan Singh

Applicant(s)

SCHMIDT, GERHARD

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Dec. 23, 2004.
2. ☒ The allowed claim(s) is/are 1-23.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

7. Examiner's Amendment/Comment:

Claim # 1, line 1, after "equipment" ----includes a first adaptive subband filter, the improvement comprising:----has been inserted.

Claim # 1, lines 2, 3, 5, change "additional filter" to ---additional adaptive filter---

Claim # 11: line 1, after "equipment" --- includes a first adaptive subband filter---has been inserted.

Claim # 11: lines 3-4, after "equipment" --being subject to additional adaptive filtering----has been inserted.

Claim # 11: line 5: before "controlling" ---wherein the additional full adaptive filtering is controlled by---has been inserted.

Formal drawings are required.

8. Examiner's Statement of Reasons for Allowance:

Claim 1 identifies the uniquely distinct feature of a device for suppressing noise in telephone equipment including a first adaptive subband filter, the improvement comprising:
an additional adaptive filter (i.e. a second adaptive filter) with a short propagation time being arranged in the transmission path of the telephone equipment, a first adaptive subband filter; wherein the additional adaptive filter includes adjustable coefficients and a control circuit for adjusting the coefficients, as shown in Fig. 3; and the additional adaptive filter operates in the full-band, while the control circuit operates in the subband. As such, claim 1 requires the additional adaptive filter operating in the fullband and the control circuit operating in the subband. While the closest prior art, Oh [US 5,933, 495] teaches a subband adaptive filter for echo cancellation and a synthesis filter (a non-adaptive filter) for noise suppression, he does not show or suggest a second adaptive filter operating in the fullband for noise suppression and the control circuit operating in the subband. As such, the prior art fails to anticipate or render the above limitation obvious. Therefore, claim 1 is allowable.

Claim 11 is essentially similar to claim 1 and hence it is allowable.


Claims 2-10 and 12-23 are dependent from claims 1 and 11 respectively are also allowable.

The claims have been re-numbered as follows:

CLAIMS NUMBER (ORIGINAL)	CLAIMS NUMBER (FINAL)
1-23	1-23

Claim no. 1 along with figure number 3 will be published in the Official Gazette.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Allowance".


SINH TRAN
SUPERVISORY PATENT EXAMINER